On June 6, 2007, the Committee held an oversight hearing on the role of the Food and Drug Administration in evaluating the safety of Avandia, a diabetes drug taken by about one million Americans. At the hearing, the Committee examined the failure of FDA to obtain an adequate post-market clinical trial designed to assess whether patients taking Avandia are at increased risk of heart attack. A preliminary transcript of this hearing is now available.

**Diabetes is a serious, chronic disease affecting millions of Americans.** According to FDA, between 18 and 20 million Americans have Type 2 diabetes, the form of diabetes that can often be managed by diet, oral diabetes medication, or a combination of the two. Diabetes is a serious, chronic disease that over time can inflict severe damage on the body, including blindness, kidney failure, and limb amputations. Two of every three people with diabetes die of heart attacks or strokes. To control the disease, diabetics must carefully monitor their diet and take either insulin or one or more medications that reduce blood sugar to more normal levels. Avandia is one of those medications.

**FDA approved Avandia for market in 1999.** The FDA approved the use of Avandia to control blood sugar levels in type 2 diabetes in 1999. About one million Americans take Avandia today. At the time the FDA approved the drug, the agency's primary medical reviewer expressed concerns about a potential "deleterious long-term effect on the heart" and recommended a post-marketing study to investigate those concerns. The manufacturer conducted a post-marketing clinical trial, but it was not designed to assess whether Avandia patients were at higher risk for heart attacks.

**FDA issued a black box warning for heart failure.** On May 23, 2007, FDA issued letters to the manufacturers of Avandia and Actos, another drug in this class, requesting that the labeling include a boxed warning to address the risks of congestive heart failure. A warning for congestive heart failure will not address the risk for heart attacks raised by the New England Journal of Medicine on May 21, 2007.

Analyses show Avandia may increase the risk of heart attack, but debate continues because of the lack of adequate post-marketing data. On May 21, 2007, the New England Journal of Medicine published a meta-analysis of 42 clinical trials finding that diabetes patients taking Avandia experience 43% more heart attacks than those not taking the drug. A number of small trials had shown a "signal" that Avandia might increase heart attack risk, but none were large enough to produce convincing proof. The meta-analysis polled data from these smaller studies to produce much stronger signal of risk, heightening concern for patients taking this drug. Better evidence of the actual heart attack risk posed by Avandia would require a large, well-designed clinical trial. Although Avandia has been on the market for 8 years, no such trial is underway, and physicians and patients do not have the clinical data they need to make an informed judgment. Witnesses at the hearing discussed the reasons for the absence of such data. They also called for FDA to have expanded authority to require manufacturers to conduct adequate post-market studies to confirm the safety of new drugs.

## Witness List:

- Andrew C. von Eschenbach, M.D., Commissioner, FDA
- Steven Nissen, M.D., Chairman, Department of Cardiovascular Medicine
- **Bruce M. Psaty, M.D., Ph.D.**, Professor of Medicine, Epidemiology and Health Services; Co-director, Cardiovascular Health Research Unit, University of Washington
- **John B. Buse, M.D., Ph.D.**, Professor of Medicine and Chief, Division of Endocrinology, University of North Carolina School of Medicine
  - Moncef Slaoui, Ph.D., Chairman, Research and Development, GlaxoSmithKline

## **Documents and Links**

- Opening Statement of Chairman Waxman
- Witness List
- Statement of FDA Commissioner von Eschenbach
- Medical Officer's 1999 Review of Avandia
- Statement of Dr. Nissen
- Statement of Dr. Buse
- Statement of Dr. Psaty
- Dr. Buse's Letter to GlaxoSmithKline
- Dr. Buse's Letter to FDA
- Statement of Dr. Slaoui
- Preliminary Hearing Transcript